

Kentucky Division of Water

2023 GENERAL PERMIT ANNUAL COMPLIANCE REPORT TEMPLATE

Phase II Stormwater MS4

Kentucky Division of Water

For questions regarding this form, contact:

Lucas Hanks

ENERGY AND ENVIRONMENT CABINET
DEPARTMENT FOR ENVIRONMENTAL
PROTECTION

Division of Water

300 Sower Boulevard, 3rd Floor

Frankfort, KY 40601

Phone: (502) 782-0143

Lucas.hanks@ky.gov

NOTE:

- In order to comply with KPDES sMS4 permits, annual reports must be submitted to the Kentucky Division of Water.
- Please type or print in ink.
- Please answer all questions **thoroughly** and return the form by the due date.
- Return this form and any required addenda through the eForms Portal.

<https://dep.gateway.ky.gov/eForms/default.aspx?FormId=50>

- Due April 15, 2023.

PART A: GENERAL INFORMATION – MS4 OPERATOR

1. Report Completed

By:

KYTC (Division of Environmental Analysis)

(MS4 Operator — i.e., name of permit holder)

2. Permit Number:

K Y S 0 0 0 0 0 3

AI #

47642

4. Population

N/A

5. Mailing Address

Kentucky Transportation Cabinet
Office of Project Development
Division of Environmental Analysis
200 Mero Street, W5-22
Frankfort, Kentucky 40622

- ☐ City
☐ County
☒ Other

of:

Kentucky Transportation Cabinet

Zip: N/A

County: N/A

PART B: GENERAL INFORMATION – CONTACT PERSON

6. Contact Person Name (please print):

Danny Peake

7. Contact Person Title:

Director of Environmental Analysis

8. Phone Number:

(502) 562-7250

9. Facsimile Number (if applicable):

10. E-mail Address (if applicable):

Danny.Peake@ky.gov

PART C: CONTROL MEASURE ACTIVITIES

11. For the following items, please provide a summary of control measure activities related to SMS4 performed during the previous year. List any updated measurable goals from the Stormwater Quality Management Plan (SWQMP), compliance activities, Best Management Practices (BMP) installed or initiated, and updated or developed regulatory mechanisms with effective dates.

A. Public Education and Outreach:

Provide a summary of your public education/outreach efforts during 2023. For each material/activity, give a brief description, the pollutant of concern, the target audience, and the number of materials distributed/attendees.

Description of the Material/Activity	Pollutant of Concern	Target Audience	Number Distributed/Attendees
Media Outreach Program airing radio and TV spots statewide - The Kentucky Broadcasters Association aired 7,954 video spots and 50,417 audio spots in 2023. - KBA distributes the ads to 230 stations in 132 communities. The KBA receives certified reports from the member stations verifying the number of times the spots are played. - Since the inception of the Media Outreach Program there have been 971,820 plays for a total value of \$20,185,610. - KYTC also utilizes the Kentucky Engineers Exposure Network to promote stormwater issues in community schools.	All point & non-point stormwater runoff	General Public	7,954 video spots and 50,417 audio spots in 2023
Road Master and Road Scholar training regarding stormwater management for the existing highway system and its maintenance administered through the University of Kentucky Transportation Center (www.kyt2.com)	All potentially project and maintenance related point & non-point pollutants	KYTC Staff, Contractors, and Design Consultants	During the 2023 report year 191 people completed Drainage training and 159 people completed Environmental Awareness training. Additionally, 439 people were trained for Pesticide Operator and 149 people were trained for snow and ice operations.
Kentucky Erosion Prevention and Sediment Control – Roadway Inspectors (KEPSC-RI) training administered through the University of Kentucky Transportation Center (http://www.kyt2.com/training/program/ky-erosion-prevention-sediment-control-kepse) KYTC employees and contractors performing erosion preventing and sediment control inspections are trained.	Sediment, hazard spills	KYTC Staff, Contractors, and Design Consultants	During the 2023 report year 398 people were trained for KESPC-RI.
Preconstruction meetings held on KYTC projects, including review of stormwater management and permit requirements	Sediment, hazard spills	KYTC Staff, Contractors, and Design Consultants	66 preconstruction meetings were held in 2023.

PART C: CONTROL MEASURE ACTIVITIES

Description of the Material/Activity	Pollutant of Concern	Target Audience	Number Distributed/ Attendees
Maintenance crew specific environmental training addressed within the KYTC Environmental Handbook for Management of Highways and Transportation Facilities (http://transportation.ky.gov/Environmental-Analysis/Pages/KYTC-Environmental-Handbook.aspx) The handbook includes activities, procedures, information and photos for actions related to highway maintenance and operations, facility-based operations, waste management, spills and emergencies in an easy to read fact sheet format.	Sediment, hazard spills	KYTC maintenance crews	Unknown
Kentucky Engineering Exposure Network (KEEN) (http://transportation.ky.gov/education/pages/keen.aspx), a volunteer group of KYTC employees, gives presentations to schools throughout the state	All point & non-point stormwater runoff	Kentucky Public School Students	A total of 27 Enviroscope presentations were given in Marion, Fayette, Anderson, and Kenton Counties in the 2022-23 school year. A total of 780 students participated. A summary of the presentations are listed in Appendix 1
Distribution of Stormwater Education Toolkits KYTC also produced and distributes Stormwater Education Toolkits for MS4 stormwater coordinators. The toolkits included resources for educating members of the community and school teachers on learning modules that met core curriculum requirements as well as about stormwater using TV and radio spots, websites, videos, PowerPoint presentations, exhibit panels, press releases, and utility bill inserts.	All point & non-point stormwater runoff	General Public	Unknown
Educational resources library utilized in workshops and one-on-one meetings (http://transportation.ky.gov/stormwater).	All point & non-point stormwater runoff	General Public	In 2023 the webpage was viewed 1,277 times from a total of 949 unique users.
KYTC participation in local MS4 activities. At the request of partner communities, KYTC District MS4 Coordinators attend stormwater meetings and events.	All point & non-point stormwater runoff	MS4 Community Members	KYTC participated in 4 stakeholder events In 2023 in District 7. All four of these events were participation by District 7 in the LFUCG Stormwater Stakeholder Advisory Council meetings.

PART C: CONTROL MEASURE ACTIVITIES

What is the primary pollutant(s) of concern for the MS4 Public Education & Outreach Program? Why was this pollutant(s) chosen?

Sediment is the primary pollutant of concern due to the potential for erosion and sediment transport on active KYTC roadway construction projects. Programs such as the Kentucky Erosion Prevention and Sediment Control – Roadway Inspectors (KEPSC-RI) training focuses on educating KYTC staff, Contractors, and project stakeholders on erosion and sediment control practices and maintenance. Additionally, Chapter 10 of the KYTC Highway Design Drainage Manual focuses on Erosion Prevention and Sediment Control (EPSC) measures.

What behavior changes is your Public Education Program seeking among the target audience(s)?

KYTC's Public Education Program seeks to educate the General Public, throughout the State, on stormwater pollution such as soil from construction sites, pet waste disposal, and proper use of pesticides. The program also seeks to clarify that stormwater drains directly to Waters of the Commonwealth without treatment. If the above lessons are effective, the program seeks that the General Public will change their behavior by carefully disposing of pet waste, applying appropriate amounts of pesticides, being aware of construction EPSC measures, reporting failures in EPSC measures, and reducing the dumping of any other hazardous materials and waste into stormwater facilities.

What is the mechanism for measuring the understanding and adoption of the targeted behaviors among the targeted audience(s)? When was the most recent measurement performed? What were the results?

*Statewide General Public surveys were performed in 2008-09 and 2016-17 to gauge public understanding of risks from stormwater pollution and prevention measures. Results of the 2008-09 survey indicated that the respondents were very knowledgeable of stormwater pollution such as oil and trash, but less knowledgeable about pollution such as pet waste, pesticides, and soil from construction sites. The survey identified that half of the population was unaware that storm drains discharge directly to Waters of the Commonwealth without treatment. Comprehensive results of the statewide survey were released in 2009 to MS4 partner communities and continues to be available at:
<http://transportation.ky.gov/Stormwater/Pages/StormwaterSurvey.aspx>.*

How have these measurements been used to direct education and outreach resources more effectively? How has the Public Education and Outreach Program been altered due to these measurements?

In response to the results of the statewide stormwater survey, the Cabinet initiated a public education media campaign, with television and radio public service announcements (PSAs) aired throughout the Commonwealth in 2010. KYTC led a committee including representatives from five MS4 communities and KDOW to develop the ads. This included development of one television and six audio PSAs to address the misconception common among Kentuckians responding to the survey that stormwater is treated at wastewater treatment plants before discharging to local streams. The process to update the ads began in the Fall of 2023 and is ongoing. The ads are being revised to update content and branding. Ads are temporarily not available while this process is ongoing. Ads are expected to be back in circulation during 2024.

What is your budget for MCM #1?

KYTC does not have a dedicated budget for MCM #1. It is incorporated in the overall budget for the Agency.

Attach documentation of all public education/outreach activities held in 2023. This should include (as applicable):

Educational Materials

- Materials distributed.
- Web addresses for online materials if the activity was online.

Educational Activities

- Documentation of the method for notifying the public of educational activities (flyers, social media posts, etc.)
- Documentation of the activities (meeting notes, minutes, agendas, pictures, etc.)
- Documentation of outreach (sign in sheets, pictures, attendance counts, etc.)

Documentation of Measurement(s) of Program Efficacy

- Results of measurement(s) of the changes in understanding and adoption of the targeted behaviors among the targeted audience(s.)

B. Public Involvement and Participation:

Provide a summary of your public involvement and participation efforts during 2023. Describe any events or activities advertised to the public by the MS4 in 2023 through which the public may be involved in the stormwater management program. For each activity give a brief description, the method of advertisement to the public, who hosted/led the activity, and the results of the activity (SWQMP changes, wastes collected, number of participants, etc.):

Description of the Activity (Include date, location, and purpose)	Method of Advertisement	Who Hosted	Results of Activity
Kentucky has participated in the International Adopt-A-Highway Program since 1988. The Adopt-A-Highway program involves community groups to organize and pick up litter thereby improving water quality.	Signage on roadways, website and National advertisements	KYTC and individual groups	There are 424 groups that manage 2,225 miles of roads throughout the state. These groups provided a total of 2,102 hours of service during 2023 with the Adopt-A-Highway program. Documentation of the Adopt-A-Highway Program is in Appendix 2.
The Division of Maintenance and Division of Environmental Analysis have begun discussions to assess educational materials for rest areas and associated public outreach programs relative to stormwater quality issues.	Still to be developed	Division of Maintenance and Division of Environmental Analysis	To be determined
The Kentucky Engineering Exposure Network (KEEN) is a unique partnership between the Commonwealth of Kentucky's school system and the Kentucky Transportation Cabinet. KYTC staff educates school children about the benefits of an engineering education, including focusing on stormwater and environmental topics. KYTC is taking steps to further utilize KEEN to integrate stormwater program messages. More information is available on the program website, http://transportation.ky.gov/education/pages/keen.aspx .	Website	Schools across the State	27 KEEN program activities were held in 2023 and included a stormwater education component via the Enviroscape Watershed Source Model. Events occurred at the following schools and programs: Marion County Middle School (1), River Ridge Elementary (6), Ryland Heights Elementary (3), Saffell Street Elementary (1), St. Joseph's – Crescent Springs (1), Upspring Summer Program (1), Yates Elementary (5).
In 2017 KYTC completed the statewide MS4 Survey to gauge public understanding of risks from stormwater pollution and prevention measures. KYTC contracted with the University of Kentucky Survey Research Center and developed a scope of work for the statewide survey.	A random sample of 4,847 adults in Kentucky MS4 Phase II regulated communities. A dual frame methodology was used with a target of including at least 25% of the interviews in each region with cell phone households. The survey response rate was 38.3%.	KYTC and University of Kentucky	The survey narrative and graphs are posted on the KYTC Stormwater website, https://transportation.ky.gov/Stormwater/Pages/default.aspx .

Description of the Activity (Include date, location, and purpose)	Method of Advertisement	Who Hosted	Results of Activity
KYTC partners with MS4 communities to participate as a stakeholder in local MS4 activities and support local stormwater program efforts. As partner communities have established Stormwater Advisory Committees (SWACs) or other stormwater related events and invited KYTC representatives to attend, KYTC District MS4 coordinators have provided support and assistance. District MS4 Coordinators participate in meetings discussing stormwater quality issues as requested by the community's stormwater program contact.	Advertisement by other MS4 Communities with KYTC participation	Other MS4 Communities	KYTC participated in 4 stakeholder events In 2023. All four of these events were participation by District 7 in the LFUCG Stormwater Stakeholder Advisory Council meetings.

If applicable, describe any events or activities in which the public was involved in the development or review of your stormwater management program.

Statewide general public surveys were performed in 2008-09 and 2016-17 to gauge public understanding of risks from stormwater pollution and prevention measures. Results of the 2008-09 survey indicated that the respondents were very knowledgeable of stormwater pollution such as oil and trash, but less knowledgeable about pollution such as pet waste, pesticides, and soil from construction sites. The survey identified that half of the population was unaware that storm drains discharge directly to Waters of the Commonwealth without treatment. Comprehensive results of the statewide survey were released in 2009 to MS4 partner communities and continues to be available at:
<http://transportation.ky.gov/Stormwater/Pages/StormwaterSurvey.aspx>.

The results of these surveys were used to inform the development and review of the stormwater management plan, particularly with the education and outreach components.

How can the public find information about the SWQMP?

The KYTC SWQMP is available on the KYTC Stormwater website at:
<https://transportation.ky.gov/Stormwater/Pages/Reports.aspx>.

What is your budget for MCM #2?

KYTC does not have a dedicated budget for MCM #2. It is incorporated in the overall budget for the Agency.

Attach documentation of all public involvement/participation activities held in 2023. This should include (as applicable):

- Advertisements to the public of each activity (flyers, social media posts, etc.)
- Documentation of the activities (meeting notes, minutes, agendas, pictures, etc.)
- Documentation of participation (sign in sheets, pictures, attendance counts, waste collection amounts, etc.)

C. Illicit Discharge Detection and Elimination:

Did you have any reported/discovered illicit discharges for 2023? If so, describe the incidents including the investigation procedures and the elimination.

Three reports of illicit discharge were noted by District 5 in their MS4 Coordinator Annual Report. These three reports included high oil & grease, high chloride and high pH. The source for all three illicit discharges was identified and resolved. No other illicit discharge reports were received. The District 5 MS4 Coordinator Annual Report is included in Appendix 3. Appendix 3 contains all received District reports.

Mapping and illicit discharge detection and elimination is accomplished on a single, locally managed system for consistency. KYTC entered into partnerships with most of the MS4 communities during their first permit term to coordinate its efforts for compliance with the MS4 Program. KYTC and the communities assist one another in meeting the requirements of the EPA MS4 Program in a more feasible and efficient manner to have a greater impact on overall pollutant reduction in stormwater runoff. KYTC is unlike municipalities in that it does not generate industrial waste or have a varying/complex network of storm sewers. There are instances where the storm sewer system from adjoining communities has discharges onto KYTC rights of way, but most KYTC storm sewer systems are limited to pipe crossings of roadways.

In areas where KYTC and the communities do not partner, the District Offices in coordination with the Division of Environmental Analysis MS4 Coordinator have developed and maintained an IDDE database. KYTC has developed an Illicit Discharge Detection and Elimination Program Document for detection of non-stormwater discharges to the MS4 systems. A critical component of this plan and procedures is education and training of KYTC staff and contractors of the hazards and regulatory concerns associated with illegal discharges and improper waste disposal.

How can the public notify the MS4 of spills or illicit discharges?

The Kentucky Division of Water or MS4 specific jurisdiction, which varies by location, should be contacted to report any spills or illicit discharges. Citizens should reach out to their jurisdiction, but may reach out to KDOW when they are not in an MS4 or unsure of an appropriate contact.

The Transportation Cabinet informs employees and the public about hazards associated with illegal discharges and improper waste disposal and where to report them. This information is included in Environmental Awareness and KEPSC-RI training and in several of the materials prepared through the Educational Toolkits. This activity includes cooperating with local MS4s as requested.

How is this reporting mechanism advertised to the public?

Each individual MS4 has their own advertising mechanisms. For example, in Lexington, the 311 program is advertised on the LFUCG website. The Kentucky Division of Water Citizen's Concerns or Complaints hotline is also publicized on their website.

Do you have a written IDDE Plan in place?

The written IDDE Plan can be found as Appendix B (Page 51) in KYTC's SQWMP (March 2013). The SQWMP is provided at the following link: <https://transportation.ky.gov/Stormwater/Pages/Reports.aspx>

Have you completed the mapping of the storm sewer system? If not, what is the percentage of the storm sewer system that has been mapped? What is your timeline to complete the mapping?

KYTC works with partner communities, and the partner communities will maintain the mapping and perform inspections. The mapping, intended to be developed in cooperation with MS4 partnering communities wherever possible, is to display the location of all known major outfalls and the names and locations of all Waters of the Commonwealth that receive discharges from those outfalls. The purpose of the map development is to become aware of system conditions and be able to detect and trace illicit discharges to the separate storm sewer system. KYTC does not maintain a separate digital map of the storm sewer system as it is often limited and/or a part of another MS4 community system. Archive plans for State projects, including drainage features and pipes is available at:

<https://hub.arcgis.com/maps/KYTC::kytc-project-archives-2/explore?location=37.876835%2C-84.518017%2C11.47>

Through its partnership with MS4 communities, KYTC offers available mapping data from highway projects. Local communities can inquire about available data through their KYTC District office. To assist with mapping efforts, the KYTC Environmental Viewer is available on the KYTC stormwater website. The Environmental Viewer is a tool that was developed to identify environmentally sensitive features near maintenance projects.

How many major outfalls discharge from your MS4? Of these, how many were dry-weather screened during 2023?
How many illicit discharges were detected via dry-weather screenings in 2023?

Total Number of Major Outfalls	Major Outfalls Dry-Weather Screened in 2023	Illicit Discharges Detected by Dry-Weather Screening in 2023
<i>In progress</i>	<i>None completed by KYTC; unknown number completed by Partner MS4 Communities</i>	<i>None</i>

Do you document dry-weather screenings with, at minimum, completed inspection checklists and photographs?

No dry-weather screening was performed by KYTC in 2023. Each MS4 community is responsible for dry-weather screening for outfalls which release stormwater in to KYTC rights of way.

Have you reviewed the most recent 303(d) list for updated information on the water quality attainment status of the local MS4 receiving waters?

The most recent 303(d) list has been reviewed for waterways potentially affected by current projects. Waterway impacts for any new project is reviewed with the current 303(d) list.

Have municipal field staff been trained on the identification and reporting of illicit discharges into the MS4? When did this training occur and who received it?

Maintenance personnel will continue to be trained annually as a component of the Environmental Awareness class offered through the University of Kentucky Transportation Center training under other elements of the permit. The course includes training on identifying potential illicit discharges and the need to notify District MS4 Coordinators where they are identified. KYTC IDDE program is included in the SWQMP.

What is your budget for MCM #3?

KYTC does not have a dedicated budget for MCM #3. It is incorporated in the overall budget for the Agency.

Please attach:

- Updated inventory of all MS4 receiving waters including the water quality attainment status and pollutants of concern for each. This should include information from Kentucky's 2022 303(d) list.
- Documentation of the discovery, investigation, and elimination of all illicit discharges in 2023.
- Checklist or form used for outfall dry-weather screening.
- Example documentation of a completed dry-weather screening including, at minimum, a completed inspection checklist and photograph(s.)
- Documentation of any public reports of spills or other illicit discharges (e.g. public reporting log).
- Documentation of all training for municipal field staff on the identification and reporting of illicit discharges conducted in 2023.

D. Construction Site Stormwater Run-off Control:

Are you permitting land disturbances for one acre or larger, or smaller than one acre if part of a larger common plan of development or sale?

KYTC complies with the KPDES Stormwater General Permit for Construction (KYR10) or Individual Stormwater Construction permits for construction through a system of standard specifications, manuals, guides, memorandums, policies, training, permitting, reports, contractual obligations, inspections, sanctions and other items. These standards and procedures are used by planning, design and construction professionals to understand and comply with KYR10 or individual construction stormwater permits. Additional community MS4 permits may be required to be submitted by KYTC on specific projects.

KYTC coordinates with other community MS4s for projects through various means, including development of the Six Year Road Plan, legislative review, and notice of projects on its web page. KYTC obtains construction stormwater permits, whether KYR10 or individual, and will incorporate local City or County MS4 requirements into the design, where feasible and not in conflict with KYTC's design practices. KYTC submitted three (3) NOIs for work at two (2) District Offices and a spoil site and obtained permit coverage during 2023.

How many permits were issued by the MS4 in 2023 for land disturbances one acre or larger, or smaller than one acre if part of a larger common plan of development or sale??

Per the May 8, 2007 Memorandum "Encroachment, KPDES, and Earth Disturbance Permits", anyone applying to KYTC for an encroachment permit to use highway right-of-way when their activity will disturb one acre or more of land are informed of their obligation to comply with KYR10. In 2023, there were approximately 6,000 encroachment permits issued as part of this policy, where any disturbances over one acre were required to file a NOI in compliance with KYR10.

Does the MS4 or its designee perform plan reviews for land disturbances of one acre or larger, or smaller than one acre if part of a larger common plan of development or sale? Is there a standardized form that is used to review plans?

KYTC performs plan review for all ongoing construction projects. Plans are reviewed to ensure disturbed drainage areas are accurately depicted and stormwater runoff is appropriately addressed. KYTC provides Standard Drawings for erosion control measures and stormwater infrastructure on the website at <https://transportation.ky.gov/Highway-Design/Pages/Standard-Drawings.aspx>. KYTC Contractors are responsible for proper erosion and sediment control measures layout and installation. KYTC has a Construction Inspector on most projects daily that reviews erosion control measures installation and maintenance.

How many plan reviews for land disturbances of one acre or larger, or smaller than one acre if part of a larger common plan of development or sale, were conducted in 2023?

KYTC performed plan reviews for all ongoing roadway projects lead by KYTC and some Local Public Agency projects that are funded through certain grants.

At what frequency are inspections occurring at active construction sites with land disturbances of one acre or larger, or smaller than one acre if part of a larger common plan of development or sale? How many inspections were conducted in 2023 at such sites? (Do not include inspections of sites with land disturbances to which this criteria does not apply.)

Inspections are occurring every week and after every rain event exceeding 0.5 inches by KEPSC-RI-certified individuals. On most KYTC projects, Inspectors are on site daily.

How many inspections in 2023 resulted in enforcement actions? Fines collected?

No inspections in 2023 resulted in enforcement actions. No fines or liquidated damages were collected.

Describe the escalating enforcement strategy utilized by the MS4 to respond to issues of non-compliance on applicable sites.

KYTC continues to incorporate EPSC measures and enforce the proper use of these measures in the design and construction of its projects through implementation of Sections 212 and 213 of the KYTC Standard Specifications, liquidated damages in contractual language with construction Contractors, and implementation of numerous design and construction memos. KYTC requires the preparation of SWPPPs by Contractors with review by inspectors and resident engineers with oversight by the Central Office Division of Construction. Site inspections are performed by qualified inspectors and resident engineers with oversight by the Central Office Division of Construction. The Division of Construction issued Construction Memorandum No. 01-13 Temporary Construction Entrances and Erosion Control Blankets in 2018. During 2022, Construction Memorandum 01-13 Temporary Construction Entrances and Erosion Control Blanket was implemented.

KYTC prohibits discharges through contractual requirements with Contractors and service personnel. Enforcement action is also routinely included in construction contracts. KYTC does not have jurisdiction over adjoining community MS4 areas, and will defer to the local MS4 or the KDOW, if necessary.

Describe the training program for MS4 staff involved in the review of erosion and sediment control plans or Stormwater Pollution Prevention Plans. What qualifications do you require for plan reviewers to perform these tasks?

KYTC has been involved in the development of the most recent SWPPP Preparers Class offered by University of Kentucky Transportation Center (UKT2). The KEPSC-RI also includes SWPPP development components. Periodically KYTC trains employees, Contractors, and/or Consultants through various venues. In 2023, training sessions were offered to train individuals on proper preparation of Stormwater Pollution Prevention Plans (SWPPPs) for erosion prevention and sediment control, including developing drainage sheets, erosion control sheets, and the BMP template. During the 2023 reporting year, 191 people completed drainage training and 398 people attended KEPSC-RI.

Describe the training program for MS4 staff involved in inspections of construction site erosion and sediment controls. What qualifications do you require for site inspectors to perform these tasks?

KYTC staff and hired Consultants developed the Kentucky Erosion Protection and Sediment Control for Roadway Inspectors (KEPSC-RI) class which:

- (1) complies with the MS4 permit*
- (2) provides guidance on complying with the KYR10 General Permit or Individual Construction Stormwater Permit*
- (3) is specific to KYTC construction methods*
- (4) satisfies the International Erosion Control Association (IECA) training module.*

The training materials were developed with a pilot class attended by several KYTC personnel and the contractors' group representative. As a result of the pilot class, changes were made and an exam developed. The curriculum includes: project development; KYR10 permit overview; temporary and post-construction BMPs; SWPPP development; Preconstruction Meetings; pre-disturbance inspections; inspector responsibilities; Best Management Practices for projects; and hands on participation in completing inspection reports. KYTC staff and contractors are required to complete the class and pass an exam for certification. KYTC projects require the contractor to employ a certified inspector. In 2023, 398 individuals completed KEPSC-RI training.

Describe any training given to operators/contractors in 2023? How often is training for operators/contractors conducted?

Operators/Contractors complete the same KEPSC-RI training as KYTC staff. In 2023, 398 individuals completed KEPSC-RI training.

What is your budget for MCM #4?

KYTC does not have a dedicated budget for MCM #4. It is incorporated in the overall budget for the Agency.

Please attach:

- Documentation of all site operator training that occurred in 2023. This should include copies of any training materials given to site operators or the web address of any online materials. For formal trainings include the date and location the training was held, who conducted the training, sign-in sheets for participants, an agenda or brief description of the training, and copies of or links to any training materials used. For one-on-one trainings include a log of when the training occurred, who was present, and a general description of topics discussed.
- Documentation of training received by MS4 staff in 2023 on the review of erosion and sediment control plans of Stormwater Pollution Prevention Plans.
- Documentation of training received by MS4 staff in 2023 on the inspection of construction site erosion and sediment controls.
- A sample copy of the permit used by the MS4 for land disturbances of one acre or larger.
- A sample copy of the form used to review plans for land disturbances of one acre or larger, if applicable.
- A sample copy of the construction site inspection form used by the MS4.

E. Post-construction Stormwater Management in New Development and Redevelopment:

Describe how the MS4 is implementing the post-construction stormwater management in new development or redevelopment requirements in your MS4; including the 80% stormwater treatment standard and the process for project review, approval, and enforcement.

Design practices and specifications (<http://transportation.ky.gov/Construction/Pages/Kentucky-Standard-Specifications.aspx>) for road construction from new and redevelopment projects disturbing greater than one acre have been established. KYTC has continued to implement and enforce these practices and specifications and ensure that controls are in place that prevent or minimize water quality impacts. Additional appropriate structural and non-structural strategies have all been developed to the Maximum Extent Practicable (MEP). KYTC will incorporate local City or County MS4 requirements into the design, where feasible and not in conflict with KYTC's design practices.

KYTC has inventoried the post-construction BMPs. In most cases, post-construction BMPs are turned over to the local City or County after construction; therefore, the City or County becomes responsible for the long-term operation and maintenance. KYTC's post-construction approach is detailed in the Post-Construction portion of the SWQMP. The SWQMP is available at <https://transportation.ky.gov/Stormwater/Documents/KYTC%20SWQMP.pdf>.

KYTC has evaluated the potential to increase use of structural and non-structural best management practices to benefit long-term water quality as a part of the project design process. It has determined that there is sufficient organization, expertise and regulatory basis for the requirement of structural and non-structural BMPs for new projects. The Division of Design and the Division of Construction implements the Karst Policy and Sections 212 and 213 of the Standard Specifications for post-construction water quality management. This policy, the "Karst Policy", was established through Design Memorandum No. 12-05 for highway projects that are developed in karst and sensitive water regions of the state. This policy results in the installation of permanent BMPs when stormwater from highways discharges to karst or sensitive waters.

KYTC also applies its regulatory authority on its construction projects through implementation of requirements in the Standard Specifications for Road and Bridge Construction. Division 200 – Earthwork contains several sections, including 212 – Erosion Control and 213 – Water Pollution Control, that are used by planning, design and construction professionals to understand and comply with the intentions of KYTC.

KYTC utilizes the 2006 KYTC/FHWA joint process review to document and evaluate environmental commitments made during the design process, evaluate whether they were completed during construction, and improve the KYTC environmental commitment process.

How many and what types of projects were reviewed for new and redevelopment considerations in 2023?

Unlike most MS4 communities, projects are not submitted to KYTC to review by Private Developers or agencies, except for the Encroachment Permit review process. Over 6,000 Encroachment Permits were received in 2023. Encroachment Permits are required for any project that impacts KYTC right of way and does not distinguish between new and redevelopment. The Encroachment Permit form is located in Appendix 4.

What types of BMPs were installed or planned to be installed by the end of construction activities at applicable sites?

KYTC developed a 65 page best management practices menu for designers. The BMPs typically have several sections including a description, purpose, construction considerations, design criteria, maintenance and cost considerations. The Division of Design posted Design Memorandum 04-19 in 2019. The memorandum incorporated the KYTC Post Construction Design Menu.

Describe the training of staff in 2023 on the fundamentals of long-term stormwater-quality treatment management BMPs and in how to review such BMPs on construction plans. Who reviews construction plans for these BMPs for the MS4? What qualifications do you require for plan reviewers to perform these tasks?

KYTC continued attendance in the KEPSC Qualified Inspector program, KEPSC-RI (Kentucky Erosion Prevention and Sediment Control- Road Inspector) for inspecting construction sites in accordance with the KYR10 General Permit. The KEPSC-RI class includes post-construction BMP training as does the Environmental Awareness Class. Other venues of training are conducted by the Division of Design and the DEA. KYTC provided training in 2023 with an attendance turnout of 398 individuals.

Describe the training of staff in 2023 on how to inspect post-construction BMPs for long-term protection, operation and maintenance. Who inspects installed post-construction BMPs for the MS4? What qualifications do you require for BMP inspectors to perform these tasks?

KYTC continued attendance in the KEPSC Qualified Inspector program, KEPSC-RI (Kentucky Erosion Prevention and Sediment Control- Road Inspector) for inspecting construction sites in accordance with the KYR10 General Permit. The KEPSC-RI class includes post-construction BMP training as does the Environmental Awareness Class. Other venues of

training are conducted by the Division of Design and the DEA. KYTC provided training in 2023 with an attendance turnout of 398 individuals.

Is the MS4 requiring long-term maintenance agreements for stormwater quality BMPs at new development and redevelopment projects?

KYTC has maintenance agreements with most of the MS4 jurisdictions and implements maintenance practices according to these agreements. Where feasible and applicable, and in the absence of a maintenance agreement, KYTC cooperates with local MS4 operators that request assistance to ensure that structural BMPs are operated and maintained over the long-term. This includes controls that are shared as real property, cooperative development, or other maintenance agreements.

Describe the process for ongoing post-construction BMP inspections with the goal of inspecting all such BMPs within the permit term.

The current practice for maintaining post-construction BMPs is included in KYTC's standard practice of maintaining all road facilities. KYTC has refined this practice by developing an inventory of its post-construction BMPs across the state. The DEA, in conjunction with the District MS4 Coordinators, Division of Highway Design, Division of Construction and the Division of Maintenance, will update the inventory as new BMPs are implemented. KYTC's Post-Construction Program document is included in the SWQMP.

How many total post-construction water quality BMPs are in the MS4? How many were inspected in 2023? Did any inspections discover a need for maintenance or repair by the owner? Did any enforcement actions result from these inspections?

Total Number of Post-Construction BMPs	Post-Construction BMPs Inspected in 2023	Number of Post-Construction BMPs Requiring Maintenance or Repair	Number of Resulting Enforcement Actions
Unknown	Unknown	None	None

If your MS4 conducts a BMP owner self-inspection program, describe that program and how you maintain oversight.

Through project specifications, Standard Specifications and contractual language, the Division of Highway Design and the Division of Construction will establish and enforce post-construction requirements. Any policy modifications developed by the Division of Highway Design or the Division of Construction via memorandums or other means are reported to the DEA MS4 Coordinator.

KYTC incorporates BMPs and buffer zones through contractual requirements with Contractors and service personnel and their Drainage Design Manual. Enforcement action is also routinely included in construction contracts. Otherwise, KYTC has no jurisdiction over adjoining community MS4 areas, and will defer to the local MS4 or the KDOW, if necessary.

Describe any changes to local ordinances in 2023 to accommodate green infrastructure alternatives.

KYTC's post-construction BMP protocol is summarized in the Post-construction Program document. The Environment Handbook will continue to be assessed by the DEA for inclusion of any new requirements in KYTC's Post-Construction Program Document. The Division of Design regularly assesses their Drainage Design Manual for updates and will consider post-construction modifications as warranted. Modifications may come in the form of Design Memos. The Division of Design and District Office TEBMs discuss Post-Construction Protocols with local partnering MS4s and incorporate their local requirements into the design, where feasible and not in conflict with KYTC's design practices. There were no changes to the Summary documents during 2023.

What is your budget for MCM #5?

KYTC does not have a dedicated budget for MCM #5. It is incorporated in the overall budget for the Agency.

Please attach:

- Documentation of MS4 staff training in post-construction stormwater management. This should include the date and location the training was held; who conducted the training; an agenda or brief description of the training; and copies of training certificates.
- A sample copy of the long-term maintenance agreement being implemented.
- A sample copy of a post-construction BMP maintenance inspection checklist used by your MS4 or for owner self-inspection, as applicable.
- A log of post-construction BMP owner self-inspection documentation oversight by your MS4, if applicable.

F. Pollution Prevention and Good Housekeeping for Municipal Operations:

The permittee must develop and implement a municipal Operation and Maintenance (O & M) program that includes a training component for municipal staff with the goal of preventing or reducing pollutant runoff from municipal operations. Please describe the progress the Pollution Prevention/Good Housekeeping Program has made in 2023.

For KYTC facilities, there are a number of programs with similar goals. It is the intent of KYTC to use these existing programs as the basis for most of the activities in this MCM. The related programs include the:

- *KPDES permit program for Highway Maintenance Facilities (KYG50);*
- *Spill Prevention Control and Countermeasures (SPCC) permit program;*
- *Groundwater Protection Plans;*
- *Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) program and KDOW permit;*
- *Superfund Amendments and Reauthorization Act (SARA) Title III; and*
- *Resource Conservation and Recovery Act (RCRA).*

These programs operate under similar programmatic goals, but under different schedules and reporting requirements, ranging from implementation of plans made available upon request to quarterly monitoring reports. KYTC's SWQMP includes a section on the Pollution Prevention/Good Housekeeping Program that summarizes how KYTC will implement MCM #6. The SWQMP can be found at: <https://transportation.ky.gov/Stormwater/Documents/KYTC%20SWQMP.pdf>.

KYTC is committed to cooperating with local MS4 operators who request assistance in training their staff to reduce stormwater pollution, as some of the municipal operations are similar to KYTC's facilities and maintenance operations. KYTC is addressing Environmental Awareness Program training for its employees by continuing to have new maintenance employees attend the Environmental Awareness class administered by UKT2. The DEA Facility Coordinator also makes presentations each year across the state at the maintenance facilities.

Has a comprehensive assessment of the pollutant discharge potential for all municipally-owned facilities been conducted? If not, indicate a status and planned completion date.

KYTC inventories owned and operated facilities that are covered under the KYG50 permit as well as facilities not covered by the KYG50 permit. There are 51 facilities not included under the KYG50 permit including 12 District offices, 25 Welcome Center/Rest Areas, and 14 truck weighing/inspection stations. During 2015 KYTC inspected all 51 facilities. The Pollution Prevention/Good Housekeeping Inspection Form is used for these purposes. This form is included in Appendix 5.

KYTC contracts out the Rest Area operations, which include requirements for stormwater pollution control, at these facilities. Rest area BMPs typically include: litter control; pet waste stations; oil spill remedial measures; maintaining a supply of oil absorbent; proper storage of deicing materials; providing trash cans; and general grounds maintenance.

Have BMPs been installed/implemented to address the pollutant discharge potential for all municipally-owned facilities?

KYTC has developed "BMP Plans" for each of its facilities in accordance with the KPDES Permit for Highway Maintenance Facilities (KYG50). The ultimate goal and resulting audits is to reduce/limit the release of pollutants to the environment from the work area. Facility personnel conduct quarterly audits, while District Office staff conducts annual audits. The DEA Facility Coordinator makes several inspections across the Commonwealth during the year. These plans address the location and potential discharge of pollutants to the stormwater drainage system. The permit program that requires the plan's development also requires monitoring and reviewing the program's effectiveness to determine if further controls are needed or if existing controls are adequate. The DEA Facilities Coordinator will summarize the BMP activities outlined in the Environmental Handbook and submit the report annually to the DEA MS4 Coordinator. These reports are included in Attachment 3.

The Environmental Handbook includes a number of activities under Highway Maintenance and Operations; Facility Based Operations; Waste Management; and Spills and Emergencies. Refer to the Environmental Handbook Table of Contents for the BMPs. A summary is included in Appendix 6.

Is the Operation and Maintenance Program/Plan written? If it is not written, indicate a status and planned completion date.

The Operation and Maintenance Program/Plan can be found within the Environmental Handbook at <https://transportation.ky.gov/EnvironmentalAnalysis/Pages/KYTC-Environmental-Handbook.aspx>.

Provide a general summary of how your Operations & Maintenance Plan provides for the inspection of structural and non-structural BMPs at municipal facilities (as described in KYG200000 section 2.2.6.3.) This summary should include the frequency of inspections, who is responsible for conducting the inspections, and what written documents are referenced for inspection criteria.

A comprehensive inspection by KYTC personnel is conducted on an annual basis. Each District Office designates someone to conduct the Facility Annual Environmental Inspection (FAEI). The FAEI is a review of the BMP Plan for the facility utilizing a FAEI Form. Any needed modifications to the BMP Plan are included on the form and/or site plan consistent with Environmental Handbook guidance. The modifications are then confirmed upon subsequent inspections. The review documents the number of stormwater management practices implemented at the facility. In 2023, 124 facilities reported an average of 45 stormwater practices implemented at each facility. No rest area facilities were reportedly inspected in 2023.

Describe any training presented to city staff on pollution prevention/good housekeeping in 2023. What municipal staff activities are covered by this training?

The KYTC Environmental Handbook for Management of Highways and Transportation Facilities was developed by the KYTC and was most recently revised in 2008. The handbook includes activities, procedures, information and photos for actions related to highway maintenance and operations, facility-based operations, waste management, spills and emergencies in an easy to read fact sheet format. The Environmental Handbook was updated in 2008 and is available on KYTC's website: www.transportation.ky.gov. As discussed in MCM #1, Environmental Awareness Training continues to be conducted on a regular basis. The class is available to non-KYTC employees, as well as KYTC employees.

What is your budget for MCM #6?

KYTC does not have a dedicated budget for MCM #6. It is incorporated in the overall budget for the Agency.

Please attach:

- Documentation of municipal staff training events. This should include the date and location the training was held, who conducted the training, sign-in sheets for participants, an agenda or brief description of the training, and copies of or links to any training materials used.
- A sample copy of an inspection checklist/document for structural and non-structural BMPs at a municipal facility.

PART D: MISCELLANEOUS INFORMATION

Provide any data regarding the following indicators (if applicable). Attach separate sheets as necessary, and indicate, as appropriate, the rationale behind not using a listed indicator.

12. Small MS4 Training

One person responsible for permit implementation is to receive at least 12 hours of documented training annually, related to furthering MS4 goals and objectives. List the person that received this training in 2023 and attach documentation for the training they received.

O'Dail Lawson received more than 12 hours of documented annual training in 2023 in the classes listed below. Confirmation of completion is included in Appendix 7.

Asbestos supervisor refresher & inspector refresher class (4 hours)

Hazardous waste site operations refresher in accordance with 29 CFR 1910.120 (8 hours)

Southwest Ohio & Northern Kentucky Stormwater Field Day (4 hours)

13. Stormwater Quality Management Plan

a.) Have there been any changes to the urbanized area covered by the MS4? If yes, is this reflected by updates to the SWQMP? Have you provided an updated MS4 Map to the KDOW?

This is not applicable to KYTC as there is not a defined urbanized area.

b) Are there any proposed changes to the goals or BMPs in the SWQMP?

There are no proposed changes to the goals or BMPs in the SWQMP.

14. Discuss any problems encountered during this period (include any BMP changes in response to problems encountered). Include any overall program weaknesses and your plan for addressing those.

The Media Outreach Program experienced disruption in 2023. The existing ad campaign was using outdated branding and was requested to be suspended in October by the Governor's Office. KYTC staff and hired Consultants are in the process of updating ads to have up-to-date branding and content. The ad campaign is expected to resume in 2024.

No other outstanding problems occurred in 2023.

15. Identify any new funding source(s) for implementing this permit.

There have been no additional funding sources.

16. Provide a summary of complaints received and the follow-up actions taken in reference to storm water quality issues.

There have been no complaints received. No follow-up actions have been taken.

17. Implementation status:

a. Are the six minimum control measures being implemented within the compliance schedule and SWQMP timetables?

☒ Yes ☐ No*

* If no, submit a revised compliance schedule and SWQMP Timetables.

b. Do you foresee any problems which may affect full implementation of all the measures?

☒ Yes ☐ No*

* If yes, explain:

KYTC anticipates that implementation of measures will be challenged by limitations in funding and staffing.

18. Do you have any impaired streams? If so, impaired for what pollutant? List all impaired Waters of the Commonwealth which receive discharges from the MS4, as well as the cause of impairment for each.

Within a year after a new 305b report is prepared by the KDOW, the DEA Water Quality SME, in conjunction with the District MS4 Coordinators, will review the list of impaired waterbodies and determine if any operational modifications have occurred to facilities that drain to these impaired waters. If operational modifications have occurred, the DEA Water Quality SME and the District MS4 Coordinator will determine if these modifications could be contributing more of the pollutant of concern than previously discharged. If the operational modifications are contributing more of a pollutant of concern, then the SWQMP will be modified accordingly. The DEA Water Quality SME will report any needed modifications to the DEA MS4 Coordinator.

For this reporting period, the DEA Water Quality SME, in conjunction with the District MS4 Coordinators, reviewed the list of impaired waterbodies to determine if any operational modifications have occurred to facilities draining to these impaired waters. There were no operational changes made at KYTC facilities requiring modifications to the SWQMP based on the 305b Report.

19. TMDL – Do you have a TMDL in your MS4? For which stream segments? What is the impairment?

When an approved or established TMDL is developed for waters within a KYTC-jurisdictional area, the DEA evaluates the BMPs in the SWQMP to assess their effectiveness for addressing the pollutant of concern and makes any necessary modifications to the SWQMP. The current SWQMP is effective in meeting pollutants of concern for the approved or established TMDL waters.

Once KYTC is notified by KDOW of the establishment of an approved TMDL within their jurisdictional area, the DEA Water Quality SME will coordinate with the local MS4 and the District MS4 Coordinators to determine if KYTC discharges the pollutant of concern from any of their facilities and operations. TMDLs are reviewed in the areas of specific projects.

20. Have there been any improvements in receiving water quality due to watershed activities in 2023?

KYTC developed a project in Marion County with receiving waters of Mussin Branch which had an existing TMDL for pH. pH levels are high in the stream and KYTC ditches upstream of the stream due to being lined by naturally occurring acid bearing black shale. The project was issued a Notice of Violation due to high pH levels. Remedial measures were put in place, including covering the exposed shale on the project with limestone. This improved receiving water quality enough for the project to be within the existing TMDL.

21. What can the Division of Water do to assist you with program compliance?

KYTC appreciates the continued partnership of KDOW and looks forward to working together in 2024.

PART E: CERTIFICATION AND SIGNATURE

► The individual completing this report, listed in "PART A: GENERAL INFORMATION – MS4 OPERATOR" must sign the following certification statement:

"By signing this annual report, I hereby certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Type or Print Name: _____

Signature: _____ Date: _____
(mm/dd/year)